



NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE

Miami, Florida 33165



Hurricane Irene passing just east of Florida on August 25, 2011

Thursday February 2: Hurricane and Flooding Awareness Day

2011 marked the sixth consecutive year in which South Florida escaped major impacts from hurricanes. The only impact from a tropical system occurred on August 25 when the extreme western fringes of Hurricane Irene skirted the southeast Florida coast. Impacts were minor and mostly related to heavy surf and beach erosion.

Despite the lack of direct hurricane strikes in recent years, South Florida remains one of the most prone hurricane regions in the country. This means that we should be prepared every for the possibility of a tropical storm or hurricane impacting our region.

The lack of south Florida hurricanes the past 6 years followed two active years in 2004 and 2005. These cycles of active and inactive years are quite typical of historical tropical cyclone patterns observed in south Florida. South Florida has gone as long as 27 years between direct hurricane strikes. On average, the center of a hurricane will pass within 50 miles of any point in South Florida every 6 to 8 years. This means that while hurricane strikes are typically not a yearly occurrence, South Florida will at least be significantly threatened a few times a decade, and impacted directly by a hurricane at least once a decade, statistically speaking.

HURRICANE SAFETY TIPS: Regardless of the short or long term hurricane outlook, South Floridians need to be prepared every year. While the extremely active hurricane seasons of 2004 and 2005 will rarely be repeated, it only takes one big storm to affect our area for long lasting impacts to be felt. Now is the time to begin preparing for the 2012 hurricane season. Develop a plan and have it in place before a storm threatens. Know if you live in a hurricane evacuation. Gather supplies such as bottled water, canned foods and batteries. Remember to buy enough provisions to last a minimum of three to five days in the event of a tropical system affecting our area. Buy and install hurricane shutters. A minimum of preparation can save lives and property.

Remember: It doesn't take a major hurricane to produce significant impacts. Tropical storms directly impacting south Florida have been known to produce severe flooding, damaging winds and tornadoes. Take every tropical cyclone seriously, whether it's a tropical storm or a major hurricane.

It is also important to note that tropical storms and hurricanes are multiple hazard events. While the wind speed is what determines the classification of a tropical cyclone, other storm hazards such as tornadoes, flooding rains, storm surge and pounding surf are just as significant and need to be taken seriously. Historically, it is the water that causes most of the deaths in hurricanes. About 90 percent of all hurricane-related deaths nationwide occur from drowning from either the storm surge or freshwater flooding. The threat from storm surge is particularly high along South Florida's coasts, and residents of coastal areas are urged to heed advice from local officials and evacuate when a hurricane threatens.

People are also urged to be extremely cautious during the storm's aftermath. Typically, more people die after the passage of a storm than during the storm itself. After Hurricane Wilma in 2005, 30 people died after the storm's passage from a combination of factors including carbon monoxide poisoning, injuries while removing debris and vehicle accidents. Extreme care must be used when using generators, and make sure to run them in an outdoor location, not inside the house.



Severe Flooding in Fort Lauderdale on October 31, 2011 (photo courtesy AP/J Pat Carter)

Flooding

South Florida's occasionally torrential rains and flat terrain often lead to flooding. While tropical weather systems produce most of the significant and widespread rain events, flooding also occurs from non-tropical related weather systems. October 2011 was a classic example of this. A total of three flood events occurred in that one month alone over large parts of South Florida. The floods of October 28-31 affected areas from South Miami to West Palm Beach and across the peninsula to the Naples area. On the evening of October 30th and early morning of October 31st, a stalled frontal system led to nearly stationary torrential rains which dumped over 10 inches of rain in only a few hours over parts of Miami, Coral Gables, Fort Lauderdale and Oakland Park. The result of all that rain over a short time period was severe flooding which impacted over 400 structures, caused power outages to about 800,000 people and led to damages estimated at about \$2.5 million.

PREPARE FOR FLOODING: The flat South Florida terrain lends itself to ponding of water in poorly drained or low lying areas during heavy rain events, rather than the flash flooding that occurs in other parts of the country. While this type of flooding is less deadly or destructive, it can cause significant impacts as water can enter homes and other structures, as well as make driving extremely hazardous due to flooded roadways which can sometimes obscure canals. If water is covering a roadway, do not assume that you can drive through it. Turn around, don't drown.

While the magnitude of the October 2011 floods is one that rarely occurs in a specific city or neighborhood, torrential rainfall events which produce anywhere from 6 to 8 inches of rain in a short amount of time and lead to severe local flooding occur at least two or three times a year over south Florida. Therefore, all South Floridians need to be aware of their particular neighborhood's vulnerability to flooding. Fortunately, people can also plan well in advance for floods. The best advice is to have flood insurance, a separate policy from your homeowners insurance. Know if you live in an area that floods frequently from heavy rains.

Monitor NOAA Weather Radio before, during and after an tropical and flood event to stay abreast of the latest information. You can also visit the National Weather Service Miami Forecast Office web site at weather.gov/southflorida where the latest hurricane and flood watches and warnings will be available, as well as the National Hurricane Center's five-day tropical cyclone track and intensity forecast.